

MOGILEVSKIY Ye. M.

FINGER, G.G.; PAKSHVER, A.B.; MOGILEVSKIY, Ye.M.

Investigating the process of desulfurization of viscose fibers. Tekst.
prom. 18 no.5:17-19 My '58. (MIRA 11:5)
(Rayon)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6

~~MOGILEVSKIY, Ye.M., kand.tekhn.nauk;~~ MOGILEVSKIY, Ye.M., kand.tekhn.nauk;
LIN'KOVA, Z.K.

Determining the degree of cellulose polymerization by the specific
viscosity of its solutions and its organic base. Tekst.prom. 18
no.4:9-11 Ap '58. (MIRA 11:4)
(Rayon) (Nylon)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.
(Cellulose)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6

~~XXXXXXXXXX~~; ALKHN, N.Ya.; KHUMINA, R.A.; LAVRUSHIN, F.I.;
ROZANOV, B.M.; GINZBERG, M.A.

New method of producing viscose solutions with a single apparatus.
Tekst. prom. 17 no.5:11-14 My '57. (MLRA 10:6)
(Textile chemistry)

MOGILEVSKIY, YE. M.

ZHIGACH, K.F., doktor khimicheskikh nauk; FINKEL'SHTAYM, M.Z., kandidat khimicheskikh nauk; MOGILEVSKIY, Ye.M., kandidat tekhnicheskikh nauk.

Production and use of cellulose carboxymethyl ether in the national economy. Khim.nauka i prom. 2 No.1:76-80 '57. (MIRA 10:4)
(Cellulose)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6
(MIRA 9:10)

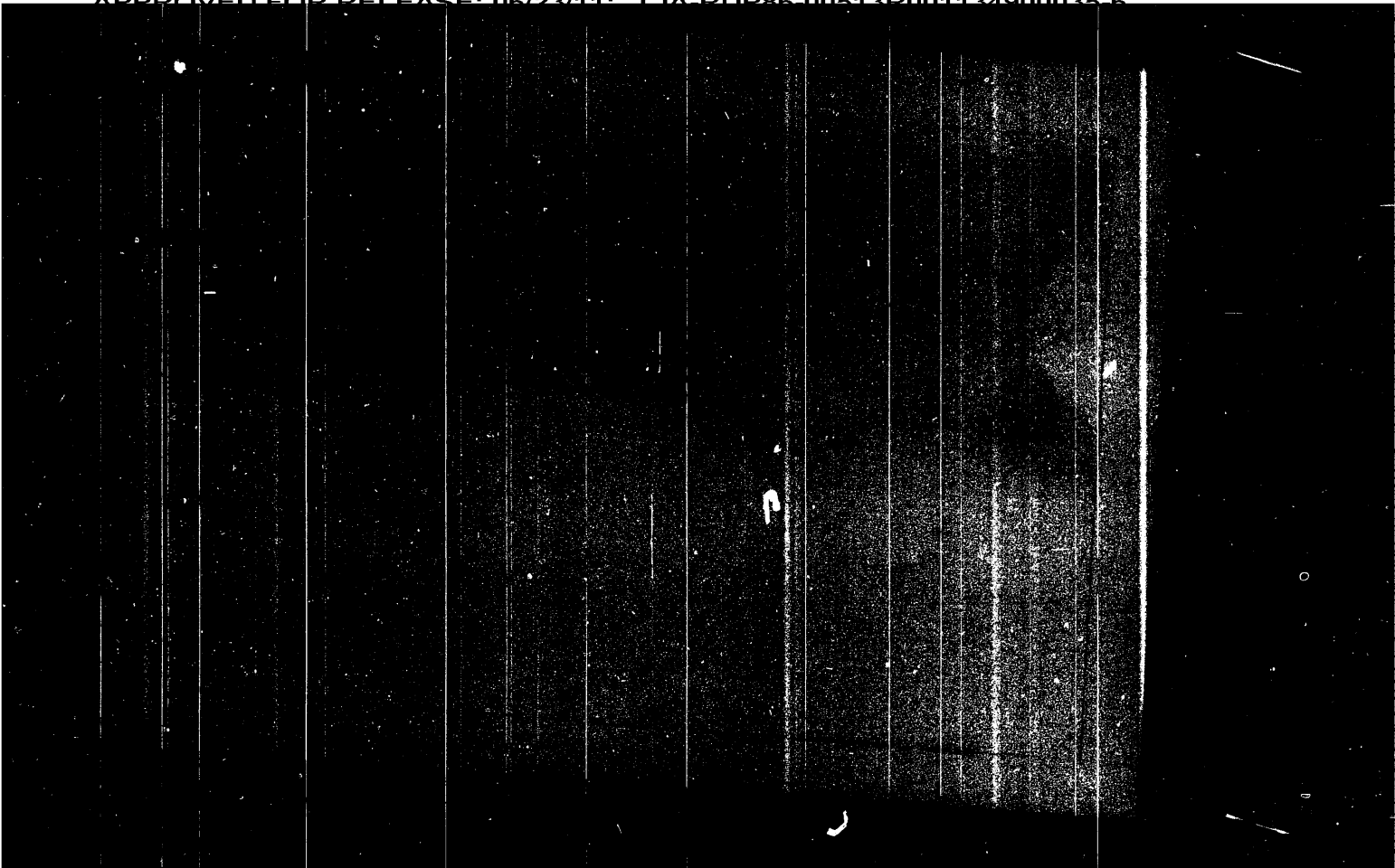
1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.
(Viscose) (Cellulose xanthates)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6

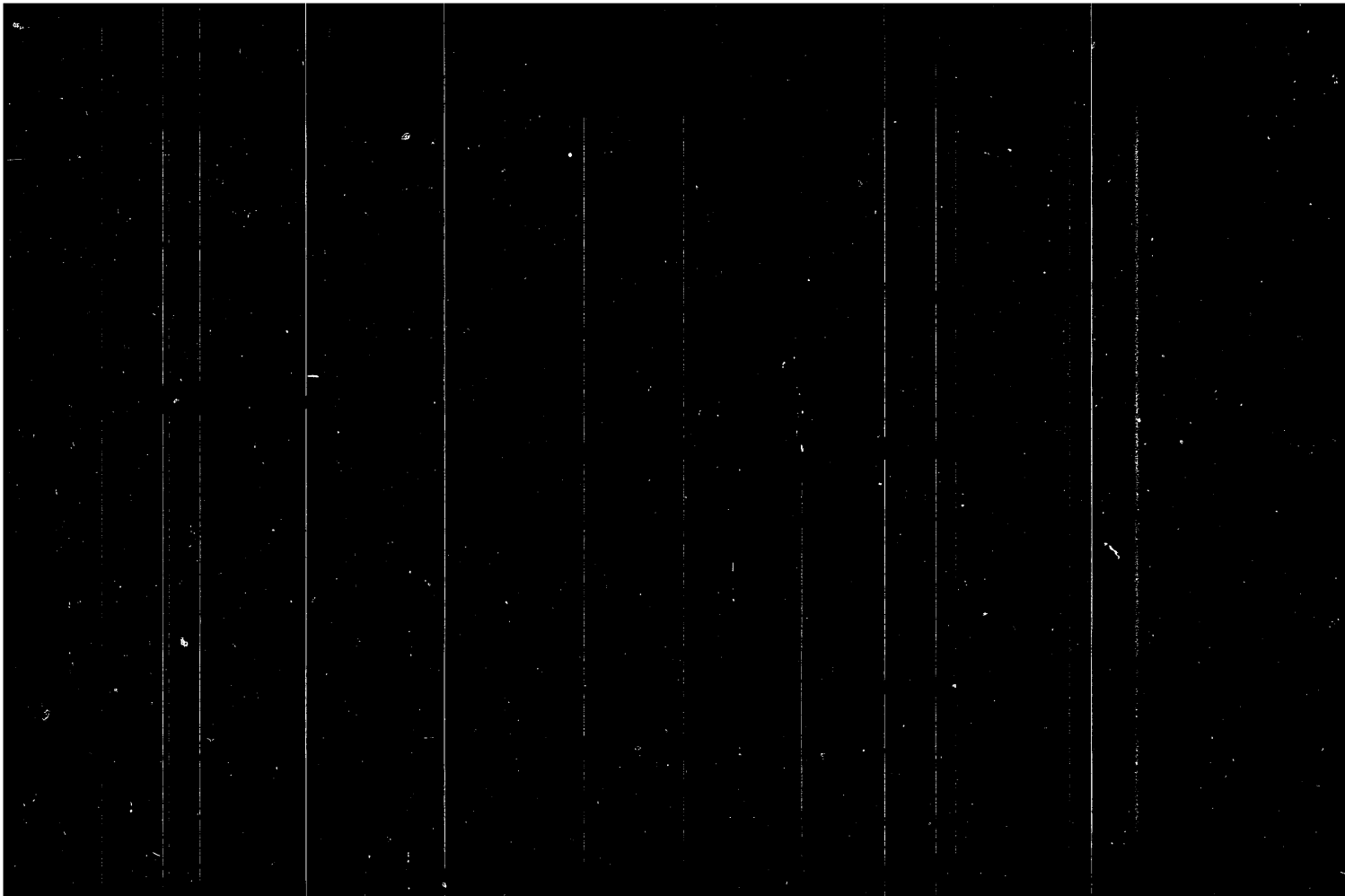
PINKHL'SHTEYN, M.Z., kand.tekhn.nauk; ZHIGACH, K.F., prof., doktor khimi-
cheskikh nauk; MOGILEVSKIY, Ye.M., kand.tekhn.nauk; TIBILOVA,
T.A., inzh., MALININA, A.I.

Carboxymethyl ethers of cellulose and their use in the national
economy. Trudy MNI no.20:67-92 '57. (MIRA 13:5)
(Cellulose)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6




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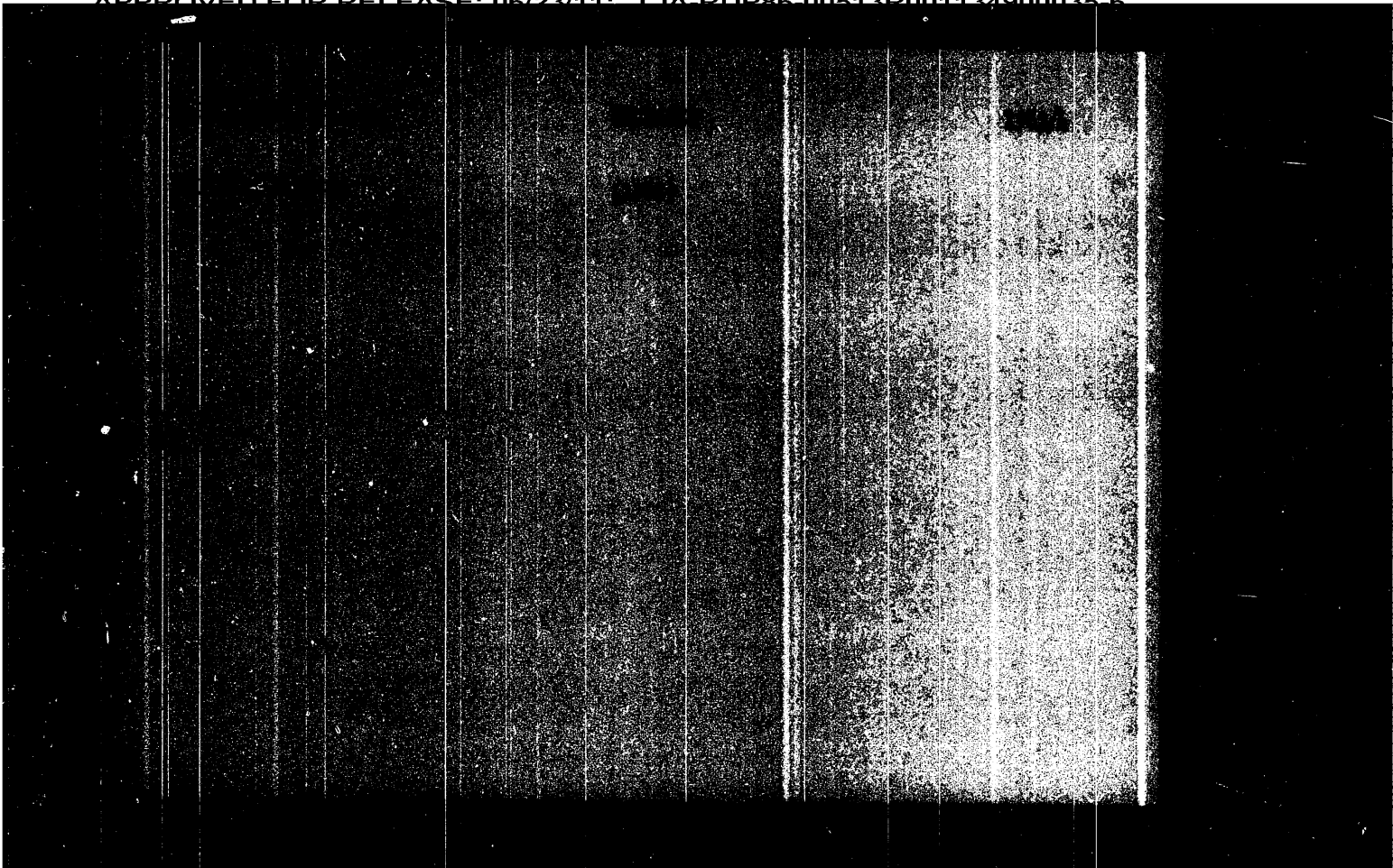
APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6



AGRANOVSKIY, I.; ARANOVICH, B.; BELYAYEVA, V.; BOL'SHAKOV, A.; GRUZDEV,
V.; DICH, S.; ZELENTSOV, I.; KONKIN, A.; LEVIT, R.; MIKHAYLOV,
N.; MOGILEVSKIY, Ye.; SERKOV, A.; SMELKOV, G.; SNETKOV, N.;
SOROKIN, Ya.; SHIFRIN, L.

In memory of Vladimir Sergeevich Smurov, 1897-1965. Khim.
volok. no.2:78 '65. (MIRA 18:6)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6



MIKHIREV, P.A., inzh.; MOGILEVSKIY, V.N., inzh.; SABLIN, R.F., inzh.;
KAMAYEV, M.G., inzh.

Automatic control of the scooping process of a single-bucket
loader. Izv. vys. ucheb. zav.; gor. zhur. 6 no.6:154-158 '63.
(MIRA 16:8)

1. Institut gornogo dela Sibirskogo otdeleniya AN SSSR.
(Mining machinery--Electric driving)
(Automatic control)

MIKHIREV, P.A.; KOSTYLEV, A.D.; VOLOD'KO, K.P.; SAVKIN, M.M.; MOGILEVSKIY, V.M.

Means for automatic control of the operation of a single-bucket
loader. Gor. zhur. no.3:69-70 Mr '63. (MIRA 16:4)

MOGILEVSKIY, V.M.

Protection from contacts to ground in high-voltage nets of
coal mines. Prom.energ. 15 no.4:22-25 Ap '60.

(MIRA 13:6)

(Automatic control) (Electric cutouts)
(Electricity in mining)

SOV/118-59-1-15/16

Automation of Conveyers in the Kuynetsk Basin.

control systems. The article mentions several improvements in some mines and contains a general description of operation of available systems of remote control. There are 4 diagrams.

Card 3/3

SOV/118-59-1-15/16

Automation of Conveyers in the Kuznetsk Basin.

automatic control of band conveyers, called the RULT, the tachometer pickup of which is built into the return roller of the band conveyer. In 1957, 70 relays RUK-2 were installed, supplemented in 1958 by 50 relays VIRS-2s. Relays RUK-2 proved less reliable, on account of frequent amplifier failures. Considerable advance in the automation of conveyers has been made, by germanium transistors used in weak-current remote-control systems. The next step in the automation of conveyer lines will be designing control systems and using the regular feed circuit as a transmission channel. The laboratoriya gornoy avtomatiki i telemekhaniki (The Laboratory for Mining Automation and Telemechanics) of the West-Siberian Section of the AS USSR has worked extensively in the field of transmission of control signals via high-frequency currents, throughout the mine's regular network. It is also working on remote

Card 2/3

28(1)

SOV/118-59-1-15/16

AUTHORS: Savkin, M.M., Candidate of Technical Sciences and Mo-
gilevskiy, V.M., Engineer

TITLE: Automation of Conveyers in the Kuznetsk Basin (Avtomatizatsiya konveyerov v Kuzbasse)

PERIODICAL: Mekhanizatsiya i Avtomatizatsiya Proizvodstva, 1959,
Nr 1, pp 57-60 (USSR)

ABSTRACT: The present degree of automation in the Kuznetsk Basin is relatively low. Of 10,500 conveyers only 239 scraper conveyers and 290 band conveyers were remote-controlled by July 1958. A great many workers still operated equipment. A number of devices have been tested and some adopted. The best results showed relays with a non-contact magneto-inductive pickup VIRS-2s. The Laboratory for Automation of the KuzNETI (Kuznetsk Scientific Research Institute for Coal) has developed, tested and prepared for serial production a device for

Card 1/3

MOGILEVSKIY, V.M., insh.; BARASH, M.I., starshiy prepodavatel'

~~Use of electronic switches in automatic control diagrams for~~
mines. Izv.vys.ucheb.sav.; gor.shur. no.3:124-129 '58.
(MIRA 12:8)

1. Irkutskiy gornometallurgicheskiy institut.
(Mine pumps) (Automatic control)

MOGILEVSKIY, V.I., inzh.

Improving the flowsheet of hydraulic hoisting. Ugol' Ukr. 5
no.4:23-24 Ap '61. (MIRA 14:4)

1. Dneprogiprosnakht.
(Mine hoisting) (Hydraulic conveying)

1. ~~Ys.Ya, kand. tekhn. nauk. kandidatsiya~~ ~~1941~~ ~~1941~~
2. ~~Ys.Ya, kand. tekhn. nauk~~

Controlling test conditions in water of the central part of
the Benets Basin. Igol' skt. 9 00120440 0 00.

1. On the basis of the generalization of the results of the
analysis of the work.

MOGILEVSKIY, V.I., insh.

Ways to reduce electric power consumption in hydraulic mines, Ugol'
Ukr. 3 no.11:11-13 N '59. (MIRA 13:3)

1.Dneprogiprosnakht.
(Hydraulic mining) (Electricity in mining)

SOV/94-58-12-2/19

The Hydro-Mechanisation of Mines

On the surface the water has to be separated from the coal and clarified. If the return water contains a lot of solid matter it causes rapid wear of the high head pumps and monitor nozzles. In other respects the coal cleaning and drying plant is much the same as in a wet washery. The absence of effective drying equipment on existing hydro-mines gives rise to some handling difficulties in winter. The operation of the drying and washing plant is briefly described. Hydro-mining has proved the most effective way of winning coal in mines even when the seams are thin and deep. A mine intended for hydraulic mining can be constructed more simply and cheaply than one of the usual types and the mechanisation is very simple and reliable in operation. There is 1 figure.

Card 3/3

SOV/94-58-12-2/19

The Hydro-Mechanisation of Mines

is dried and cleaned if necessary in a special surface plant. The water circulates in a closed cycle. The success of hydro-mining mainly depends on breaking up the coal finely enough and for this purpose the water jets are saturated with air before being directed on to the seam. The different methods of transporting the water and coal in the shaft are discussed. The slurry can be transported over any required distance provided that a slope of 0.04 to 0.05 can be provided. When the slurry has to be transported under pressure, as for pumping up the shaft, the coal must be pulverised so that particle sizes do not exceed 100 mm and hammer type crushers are usually used for this purpose. When the shafts are more than 200 metres deep it may be necessary to use more than one slurry pump on the line so that the slurry pump at the bottom of the shaft discharges to the intake of the slurry pump higher up and so on. When hydro-mining is used there is no need to provide long underground cables to supply electric drills, fans and lighting. The Tomsk Electro-Mechanical Works has developed hydro-operated fans and lighting machines.

Card 2/3

AUTHOR: Mosilavskiy, V.I., Engineer

SOV/94-58-12-2/19

TITLE: The Hydro-Mechanisation of Mines (Gidromekhanizatsiya shakht)

PERIODICAL: Promyshlennaya Energetika, 1958, Nr 12, pp 4-6 (USSR)

ABSTRACT: Coal mines employing hydro-mining methods consume about twice as much electric power as ordinary coal mines, nevertheless the cost of coal is 30% less than in ordinary mines and the capital cost of hydro-mining is 30 to 35% less than that of ordinary mining. In the Kuznetsk basin there are six mines using hydraulic mining including the ~~Polysayevskaya~~ Severnaya Mine which has been operating for three years. A number of new mines of this type are due to be opened in the Kuznetsk Basin. In the Don basin two experimental hydro-sections were constructed in 1957 and it is intended to use hydro-mining at more than 30 sections of existing mines. In hydro-mining the coal is extracted with a hydro-monitor and it is transported to the pit bottom by the stream of water from the monitor. Thence the coal is pumped to the surface in the form of a water suspension, the coal

Card 1/3

MOGILEVSKIY, Vladimir Grigor'yevich; SUD, I.I., red.

[Electromagnetic powder clutches and brakes] Elektro-
magnitnye poroshkovye mifty i tormoza. Moskva, Energiia,
1964. 104 p. (Biblioteka po avtomatike, no.116)
(MIRA 17:12)

MOGILEVSKIY, V.G. (Moskva); SUD, I.I. (Moskva); SHTURMAN, L.I. (Moskva)

Electromagnetic power brakes for drilling winches. Elektrichestvo
no.10:70-74 0 '63. (MIRA 16:11)

MOZIL'VSKIY, Terentiy Petrovich; SHORIN, V.G., redaktor; PROZOROVSKAYA, V.L., tekhnicheskii redaktor

[Collection of problems and exercises in transportation and storage connected with coal dressing and briquetting plants] Sbornik zadach i uprashnenii po transportnym ustroistvam i skladam ugleobogatitel'nykh i briketnykh fabrik. Moskva, Ugletekhnizdat, 1955. 226 p.

(Coal--Transportation) (Coal--Storage)

(MLRA 9:1)

MOGILEVSKIY, T. A.,

Finkel'shteyn, M. Z., K. F. Zhigach, Ye. M. Mogilevskiy, T. A. Tibilova, and
A. I. Malinina. "Carboxymethyl Ethers of Cellulose and Their Use in Industry"

Problems of Petroleum Production and Petroleum Engineering, Moscow, Neftyanoy
institut, Gosgizkhimizdat, 1957, 393pp. (Trudy vyp. 20)
This book is a collection of articles written by professors and faculty members
of the Petroleum Inst. in I. M. Gubkin.

FIDNELV, Aleksandr Savel'yevich; MOGILEVSKIY, Solomon Mamonovich; STYRNENKO, Konstantin Konstantinovich; KUCHEROV, P.S., redaktor; ZIL'BAN, M.S. redaktor; RAKHLINA, M.P., tekhnicheskiy redaktor.

[Trolleytrucks for transportation in open-cut mines] Trolleivoznyi kar'ernyi transport. Kiev, Izd-vo Akademii nauk USSR, 1956. 106 p.

1. Chlen-korrespondent AN U.S.S.R. (for Kucherev) (MLRA 9:5)
(Mine haulage) (Motortrucks)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6

7. Trolley type transport at open pit mines. Dr. A. S. Fidelev, Eng. S. K. Mogilevskiy, Mekh. trud. rab. 7, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

On the Representation of a Completely Continuous
Operator in an Abstract Separable Hilbert Space

SOV/140-58-3-23/34

SUBMITTED: December 20, 1957

Card 3/3

On the Representation of a Completely Continuous
Operator in an Abstract Separable Hilbert Space

SOV/140-58-3-23/34

the operators. The operators A^*A and AA^* are called non-degenerate, if their spectrum contains infinitely many eigenvalues and if $\lim_{k \rightarrow \infty} \mu_k^2 = \infty$. The operators are called

degenerate, if the spectrum has only finitely many eigenvalues.

Theorem: For every completely continuous operator A in H there holds one of the following expansions ($\phi \in H$):

$$1.) A\phi = \sum_{k=1}^{\infty} \frac{(\phi, \varphi_k)}{\mu_k} \varphi_k, \text{ if } A^*A \text{ and } AA^* \text{ are non-degenerate}$$

or

$$2.) A\phi = \sum_{k=1}^n \frac{(\phi, \varphi_k)}{\mu_k} \varphi_k, \text{ if } A^*A \text{ and } AA^* \text{ are degenerate.}$$

ASSOCIATION: Kalininskiy gosudarstvennyy pedagogicheskiy institut imeni
M.I. Kalinina (Kalinin State Pedagogical Institute imeni
M.I. Kalinin)

Card 2/3

AUTHOR: Mogilevskiy, Sh.I. SOV/140-58-3-23/34

TITLE: On the Representation of a Completely Continuous Operator in an Abstract Separable Hilbert Space (O predstavlenii vpolne nepreryvnogo operatora v abstraktnom Gil'bertovom separabel'nom prostranstve)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1958, Nr 3, pp 183-186 (USSR)

ABSTRACT: Let A be a completely continuous operator in H , A^* the adjoint operator and let

$$(1) \quad \begin{aligned} \varphi &= \mu A^* \psi \\ \psi &= \mu A \varphi \end{aligned} \quad \varphi, \psi \in H; \quad \mu \text{ parameter.}$$

The system (1) is equivalent to the system

$$\varphi = \mu^2 A^* A \varphi$$

$$\psi = \mu^2 A A^* \psi$$

Let φ_k and ψ_k be the fundamental elements of the operators $A^* A$ and $A A^*$ and let μ_k^2 be the eigenvalues of

Card 1/3

MATVEYEV, K.; MOGILEVSKIY, Sh.

Operational efficiency of motor vehicles is higher than that
suggested for the end of the seven-year plan. Avt.transp.

38 no.3:8-9 Mr '60. (MIRA 13:6)

(Moscow--Transportation, Automotive)

MOGILEVSKIY, R.B.

Mechanization of production processes at the Karl Marx Plant.
Mashinostroitel' no.10:19-20 0 '61. (MIRA 14:9)
(Leningrad--Textile machinery)

MOGILEVSKIY, N.M.

KUZ'MICH, A.S., redaktor; BARABANOVA, P.A., redaktor; BOHROV, I.V., redaktor; VLADIMIRSKIY, V.V., redaktor; GRAPOV, L.Ye., redaktor; DOMUKIN, A.V., redaktor; YKRASHKO, I.S., redaktor; ZABLODSKIY, G.P., redaktor; ZADN-MIDKO, A.N., redaktor; ZAYTSHEV, A.P., redaktor; ZASADYCH, B.I., redaktor; KAGAN, P.Ya., redaktor; KRASNIKOVSKIY, G.V., redaktor; KRIVONOGOV, K.K., redaktor; LALAYANTS, A.M., redaktor; MELAMED, Z.M., redaktor; MINDELI, B.O., redaktor; MOGILEVSKIY, N.M., redaktor; OSTROVSKIY, S.B., redaktor; POPOV, T.T., redaktor; SMOCHINSKIY, A.A., redaktor; SKURAT, V.K., redaktor; SOBOLEV, G.G., redaktor; STUGAREV, A.S., redaktor; SUMCHENKO, V.A., redaktor; TERPIGICHEV, A.M., redaktor; SHEVYAKOV, L.D., redaktor; SHELKOV, A.A., redaktor; ANDREYEV, G.G., tekhnicheskiy redaktor

[Safety regulations in coal and shale mines] Pravila bezopasnosti v ugol'nykh i slantsevykh shakhtakh. Moskva, Ugletekhizdat, 1953. 226 p. (MIRA 8:4)

1. Russia (1923- U.S.S.R.) Ministerstvo ugol'noy promyshlennosti.
(Coal mines and mining--Safety measures)

MOGILEVSKIY, N.I.

[Introduction to analysis; synopsis of lectures on mathematical analysis for persons who study without discontinuing work] vvedenie v analiz; konspekt lektsii po matematicheskomu analizu dlia studentov, obuchaiushchikhsia bez otryva ot proizvodstva. Khar'kov, Khar'kovskii politekhn. in-t im. V.I.Lenina, 1961. 85 p. (MIRA 17:8)

MOGILEVSKIY, N.A.; KARACHINA, K.N.

Significance of hapten reaction in sanitary evaluation of quality of water. Gig. sanit., Moskva no.7:51-52 July 1953. (GML 25:1)

1. Moscow Oblast Scientific-Research Sanitary Hygiene Institute.

MOGILEVSKIY, N.A.; KIRACHINA, K.N.

Role of the hapten reaction in evaluating the quality of water from the
sanitary point of view. Gig. i san. no.7:51 Ji '53. (MLRA 6:7)

1. Moskovskiy oblastnoy nauchno-issledovatel'skiy sanitarno-gigiyeniche-
skiy institut. (Water--Analysis)

MOGILEVSKIY, M. Sh.

Isolation and purification of streptococcal hyaluronidase.
Vop. med. Khim. 9 no. 3:288-293 My-Je '63. (MIRA 17:9)

1. Otdel mikrobiologii Instituta eksperimental'noy meditsiny AMN
SSSR, Leningrad.

MOGILEVSKIY, N.Sh.; MAL'CHEVSKAYA, V.I.; VOYNAROVSKAYA, Ye.P.

Mechanism of activation of chloramine in aqueous solutions.

Gig.i san. 24 no.8:77-80 Ag '59.

(MIRA 12:11)

1. In laboratorii Leningradskoy gorodskoy desinfektsionnoy
stantsii.

(ANTISEPTICS, HALOGEN, chemistry)

MOGILEVSKIY, M. Sh.; KLYUCHAREVA, I.S.

Mucinase properties of blood serum of humans and white rats. Doklady
Akad. Nauk S.S.S.R. 88, 321-4 '53. (MIRA 6:1)
(CA 47 no.14:7062 '53)

1. Pasteur Epidemiol. and Microbiol. Inst., Leningrad.

istry, Biological - Hyaluronic Acid 1 Jan 52
 Mechanical Disintegration of Hyaluronic
 Acids and Agar-Agar on Their Properties,"
 Iosvsky, I. S. Klyuchareva, Sci Res Inst
 of Microbiol (Mosc Pasteur

UR SSSR Vol LXXIV, No 1, pp 165-167

the polysaccharides of which hyaluronic
 acid-agar are composed undergo depolymeri-
 zation as a result of mech treatment. For that rea-
 son, the disintegration of hyaluronic acid which is
 a substrate for detg the activity of
 hyaluronidase is to be avoided. Data of the structure
 of hyaluronate salts was carried out

224724

Chem Lab, Leningrad Inst of Blood Trans-
 fusion and its use of their stud method. Presented by
 Goparin 3 May 52.

Medicine - Ultraviolet light

11 Jan 51

**"Action of Ultraviolet Radiation on Hyaluronic Acid,"
M. Sh. Mogilevskiy, A. L. Laufer, Inst Epidemiol and
Microbiol imeni Pasteur**

"Dok Ak Nauk SSSR" Vol LXXVI, No 2, pp 239-242

**Ultraviolet radiation depolymerizes hyaluronate. Ef-
fect is direct and does not involve activation of
hyaluronidase: Activity of the latter is consider-
ably reduced by exposure to ultraviolet light.**

179875

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6
1937. 44 p., diagrs. (TSAGI. Trudy, no. 312)

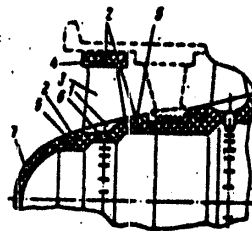
Summary in English.

Title tr.: Downwash at the tail surfaces of an airplane with a wing of an arbitrary form.

QA911 M65 no.312

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

ACC NR: APT009094



1—vane; 2—fiberglass banding; 3—blade; 4 and 5—upper and lower shelves; 6—fastening pins (sleeves); 7—hub of the wheel

SUB CODE: ¹⁰~~10~~ SUBM DATE: 22Sep65

Card 2/2

ACC NR: AP7009094

SOURCE CODE: UR/0413/67/000/003/0067/0067

INVENTOR: Gel'fer, V. A.; Mogilevskiy, M. A.; Polonskiy, I. Ye.; Vygodskiy-Sogolovich, E. N.; Malyutin, P. V.; Rumyantsev, A. P.

ORG: None

TITLE: A turbine wheel. Class 27, No. 191036

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1967, 67

TOPIC TAGS: turbine rotor, fiberglass, turbine blade, plastic

ABSTRACT: This Author's Certificate introduces: 1. A turbine wheel which may be used in an axial-flow compressor with vanes and banding made from thermosetting fiberglass-reinforced plastics. Reliability is improved and manufacturing technology is simplified by making the blade of the vane in one piece with upper and lower shelves and equipping these shelves with grooves for winding on continuous glass fibers saturated with resin. The butt section of the vane carries fastening pins for connection to the hub of the wheel. 2. A modification of this wheel with optimum blade spacing. The vanes are made with a constant meridian cross sectional area.

Card 1/2

UDC: 677.521:621.515.53-253

INDENBOM, V.I.; MOGILEVSKIY, M.A.; ORLOV, A.N.; ROZENBERG, Y.M.

Physical nature of the group of crystalline bodies (review). INTF
no.1:160-167 Ja-P '65. (MIRA 13:0)

MOGILEVSKIY, M.

MOGILEVSKI, M. and KOGAN, L.

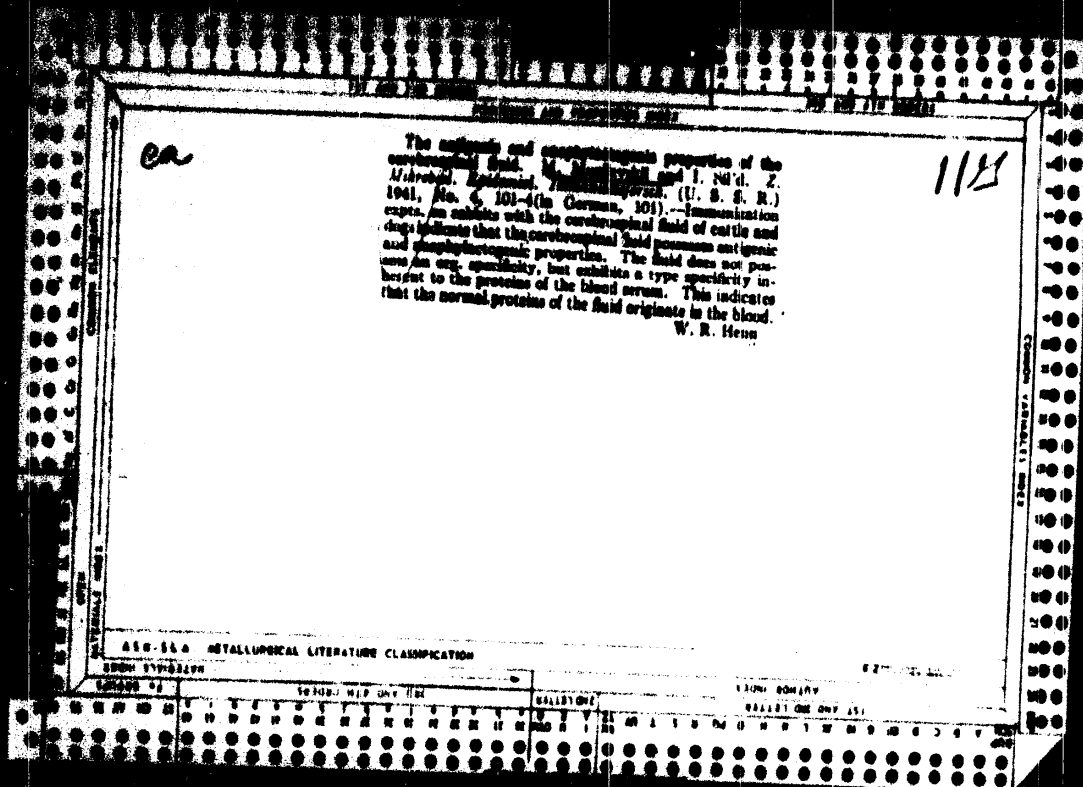
Action of electrolytes on the viscosity of hyaluronic acid

Paragraph 2418 Biochimia, Moscow 1948, 13/5 (417-420) Graphs I Tables 3

The viscosity of the hyaluronic acid solutions is markedly reduced in the presence of inorganic salts even in salt concentrations as low as 0.002 N. The action is greater with polyvalent cations. The effect is reversible. Electrolytes also prevent gelling in acid solution in the presence of serum. Results of quantitative studies are tabulated. Since extracts to be tested for hyaluronidase activity often contain salts, dialysis is advisable.

S0: Section II Vol. 3 No. 1-6

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100 AND 200 COPIES		100 AND 4TH COPIES	
PROCEDURES AND PROPERTIES INDEX			
01		11f	
<p>Extractive substances of the heart muscle. II. Creatine, methylguanidine and anserine in the heart muscle. M. G. Moore. <i>Bull. biol. med. exp. U. R. S. S.</i> 3, 615 (1957); <i>Chem. Zentr.</i> 1958, 1, 6353; cf. C. A. 53, 2615. —Creatine, methylguanidine and a substance whose properties were very like those of anserine were isolated from sq. exts. of the heart muscle of large, horned, domestic animals. M. G. Moore</p>			
ASD-11A METALLURGICAL LITERATURE CLASSIFICATION			
SIGNATURE		FROM SOURCE	
100000 03		001107 001 000 151	

Volometric determination of calcium lactate. M. Mogilevskii and B. Brodskii. *Zh. fizichesk. khim.* 2, 342-5 (1932). — As an improved procedure for routine control in lactic acid manuf., it is recommended that Ca lactate be titrated with *N* HCl against methyl violet. The detn. can be made in a few min., and is accurate to 0.2-0.3% in lactate concns. of about 10%. The method is applicable to solns. not contg. large amts. of other org. acids. ✓
Julian F. Smith

ASD-31A METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6
inzh.-podpolkovnik, red.; ZUDINA, M.P., tekhn. red.

[Telephony] Telefonii. Moskva, Voenizdat, 1963. 397 p.
(MIRA 16:10)

(Telephone)

MOGILEVSKIY M.M.

GURIN, A.S.; KUM'NIN, A.A.; DRONDOV, L.V.; MOGILEVSKIY, M.M.; GOLOVESH-
KIN, V.G. [deceased]; FROLOV, A.A.; CHUTINOV, I.I., podpolkovnik;
SOLOMONIK, E.L., tekhnicheskii redaktor.

[Telephone] Telefonika. Moskva, Voennoe izd-vo Ministerstva obo-
rony SSSR, 1954. 583 p. [Microfilm] (MERA 7:11)
(Telephone)

BARGER, G.S.; MOGILEVSKIY, M.D.

Innovations introduced by workers of the Krasnyi Aksai
Plant. Mashinostroitel' no.9:16-17 S '62. (MIRA 15:9)
(Rostov-On Don—Agricultural machinery industry)

MOGILEVSKIY, M.D.

Device for cutting rubber. Mashinostroitel' no.4:28 Ap '62.
(MIRA 15:5)
(Cutting machines)

MOGILEVSKIY, M.A.; VELMER, A.Ye.; VAL'D-PERLOV, V.M.

Determination of local magnetic fields on the sun by means of
modulated photoelectric spectrophotometer. Dokl.AN SSSR 95 no.5:
957-959 Ap '54. (MLRA 7:4)

1. Nauchno-issledovatel'skiy institut zemnogo magnetizma.
Predstavleno akademikom G.A.Shaynom.
(Solar radiation) (Photometry, Astronomical) (Spectrophotometer)

GRINBERG, Ya; MOGILNYSKIY, M.

Experience in running cargo ships on a schedule. Mor.flet.15
no.11:4-6 N '55. (MIRA 9:2)

1.Starshiye dispetchery Chernomorskogo parokhodstva.
(Ships--Cargo)

MOGILEVSKIY, L., inzh.

Avometer using two transistors. Radio no. 10-15-46 0 154.
(MIRA 18:2)

4
RASPOPOV, V.I., konstruktor; SUKACH, A.D., konstruktor; D'YACHENKO,
K.I., konstruktor; LITVINOV, G.A., konstruktor; GOL'DSHTEYN,
M.Ya., konstruktor; MOGILEVSKIY, L.G., konstruktor; ZAYTSEV,
G.I., konstruktor; BURLYGA, F.I., red.; SAMOLETOVA, A.V.,
tekhn. red.

[New equipment unit on pitching seams] Novyi kompleks na kru-
topadaiushchikh plastakh. Stalino, Knishnoe izd-vo Stalino-
Donbas, 1961. 56 p. (MIRA 16:6)
(Coal mining machinery)

BARTOSH, N.T.; MOGILEVSKIY, L.D.; SHARANOVICH, P.A.; VOROSHILOV, B.P.,
insh., retsentent; GERASIMOV, V.G., insh., red.; LEYKINA,
T.L., red. 1st-va; BARDINA, A.A., tekhn. red.

[Manual for the operator of machinery used in loading and
unloading] Spravochnik mekhanisatora pogrushchno-rasgruzochnykh
rabot. Moskva, Mashgis, 1963. 419 p. (MIRA 16:8)
(Loading and unloading--Equipment and supplies)

RAMN, Spiridon Naumovich, dots.; LILICH, Galina Alekseyevna, kand.
filol. nauk; MOGILEVSKIY, Lav Davydovich, insh.; SMUL'SKAYA,
T.K., red.; PLAKSEE, L.Yu., tekhn. red.

[Czech-Russian leather and shoe dictionary]Cheshako-russkii ko-
chevenno-obuvnoi slovar'. Moskva, Glav. red. inostr. nauchno-
tekhn. slovarei Pismatgisa, 1962. 135 p. (MIRA 16:3)

(Czech language--Dictionaries--Russian)
(Leather--Dictionaries) (Boots and shoes--Dictionaries)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6

MOGILEVSKIY, L., inzh. (Leningrad)

Cathode-ray characteristics tracer using transistors.
Radio no.7:55-56 J1 '65.

(MIRA 18:9)

SOBOLEV, N.A.; MOGILEVSKIY, I.Ya.

[Knit goods industry during the years of the Soviet regime]
Trikotazhnaya promyshlennost' za gody sovetskoi vlasti.
Moskva, Biuro tekhnicheskoi informatsii legkoi promyshlennosti,
1957. 46 p. (MIRA 12:6)
(Knit goods industry)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6

1. Odesskiy tekhnologicheskii institut pishchevoy i kholodil'noy
promyshlennosti.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6
i ov. prom. 12 no. 1077-41 v

1. Odesskiy zavod imeni Voroshilova (for Podkopyayev). 2. Ukrainskiy
nauchno-issledovatel'skiy institut konservnoy promyshlennosti (for
Mogilevskiy). (Odessa--Canning and preserving)

GUBIN, V.V., dotsent; MOGILEVSKIY, I.S.; GEL'MUT, A.Ye., gornyy inzh.

Coping with the rated capacity of mine No.8 of the "Prokop'-
yevskugol'"Trust. Ugol' 38 no.11:8-10 N '63.

(MIRA 17:9)

1. Gornyy fakul'tet Sibirskigo metallurgicheskogo instituta
(for Gubin). 2. Glavnyy inzh. shakhty No.8 tresta Prokop'-
yevskugol' (for Mogilevskiy). 3. Shakhta No.8 tresta Pro-
kop'yevskugol' (for Gel'mut).

MOGILEVSKIY, I.S., inzh.

Increasing the reliability and durability of diesel engines.
Mashinostroenie no.3:9-10 My-Je '64.

(MIRA 17:11)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6

pressure drops below 1.8 kg/cm². (4) The radiator water level drops below a given limit. (5) The engine rpm rises above 1700. (6) The automatic control circuit voltage collapses and (7) The generator is overloaded. The centrifugal relay guarding against overspeeding is shown in cross section in Fig.3. Modified schemes for limited automation are under development. There are 3 illustrations including 1 photograph.

Card 3/3

Automatic Diesel Generating Set DGA-48

unit itself. Starting is initiated by a voltage or temperature signal or the failure of another unit in the same station to start. The starting signal causes the incandescent plugs and the oil pump drive to be switched on. 5 seconds after connecting the plugs the electrical starter is started and runs for 9 seconds. If starting is unsuccessful, another 9 seconds are given after 5 seconds of rest. After 4 attempts, failure to start is signalled. After reaching 500 rpm, a centrifugal relay disconnects the starter, the plugs and the oil pump. On reaching 1350 rpm, readiness to accept load is signalled. The automatic synchroniser acts on a remotely controlled servo-motor actuating the fuel pump. Interlocks ensure an oil temperature exceeding 35°C and a cooling water temperature exceeding 65°C before load is accepted. The automatic control system is responsive to the following faults:-

- (1) The cooling water temperature exceeds 100°C.
- (2) The oil temperature exceeds 90°C.
- (3) The oil

Card 2/3

SOV/122-58-11-13/18

AUTHORS: Mogilevskiy, I.S., Engineer
Lekhovitser, M.A., Engineer

TITLE: Automatic Diesel Generating Set DGA-48
(Avtomatizirovannaya dizel'generatornaya ustanovka DGA-48)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 11, pp 70-74 (USSR)

ABSTRACT: The 48-kvt, 400-volt generating set is designed to supply electric power to apparatus and to provide auxiliary power for the diesel-engine power station. The automatic functions of the set include starting and stopping of the engine, load control, protection of the set from abnormal operating conditions, servicing the engine and generator during operation, and the supply of auxiliary power. The generating set may operate for 200 hours without the attendance of servicing personnel. [Please disregard first two words on card 2/3]

Card 1/3

MOGILEVSKIY, Isaak Moiseyevich; YEVTUKH, N.I., inzh., retsenzent;
PAN'KO, V.I., inzh., red.

[Equipment of fish processing plants] Oborudovanie rybo-
zavodov. Kiev, Tekhnika, 1964. 117 p. (MIRA 17:11)

1. MOGILEVSKIY, I. M.
2. USSR (600)
4. Hydraulic Machinery
7. Topchienko water separator. Ryb.khoz. No. 12 1952

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

ACC NR: AP6033654

or pack-rolled billets. Rails with G13 steel cladding as unsatisfactory properties. Orig. art. has: 3 figures.

SUB CODE: 13/ SUM DATE: none

Card 2/2

ACC NR: AP6035654 (A) SOURCE CODE: UK/0133/66/000/011/1028/1029

AUTHOR: Kazarnovskiy, D. S. (Professor, Doctor of technical sciences);
 Gunin, I. V. (Candidate of technical sciences); Krivonoz, Yu. I.
 (Candidate of technical sciences); Kravtsova I. P. (Candidate of tech-
 nical sciences); Saprygin, Kh. M. (Candidate of technical sciences);
 Arshavskiy, V. Z. (Candidate of technical sciences); Chetverikov, A. V.
 (Engineer); Mogilevskiy, I. I. (Engineer); Orinichev, S. K. (Engineer)

ORG: none

TITLE: Production technology for high-strength rails

SOURCE: Stal', no. 11, 1966, 1028-1029

TOPIC TAGS: high strength steel,
 metal cladding, railway track, bimetal, hot rolling/M75X steel,
 G13 steel, Rk5 steel, St.5 steel

ABSTRACT: An investigation had been made to develop a process for pro-
 ducing bimetallic rails, i.e. rails with a high-strength steel head.
 St.5 steel billets clad with M75X, G13, or Rk5 alloy steels were hot-
 rolled into 100 x 150 mm bars which, after reheating, were rolled into
 R-18 type rails. Rails with arc-deposited cladding had the highest bond
 strength and the most satisfactory surface quality. With M75X or Rk5-
 steel cladding, satisfactory results were obtained with cast composite

Cord 1/2 UDC: 621.774.26

D'YACHENKO, E.K.; DABAGYAL, B.F.; ZHIVONOSOV, Yu.I.; MOGILEVSKIY, I.I.;
PRAKOSHILOV, B.M.; CHUL'GA, Ye.A.

Pack rolling of two-layer sheet. Metallurg 10 no.7:35-36 1965.
(MIRA 18:7)

1. Ukrainskiy Institut metallov i KommunarSKIY metallurgicheskiy
zaved.

MOGILEVSKIY, I.I., inzh.

Concerning the article "Determining the operative capacity of
the roller press" by Engineer N.F. Gorin. Torf. prom. 40
no.6:18-19 '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy
promyshlennosti.

KORCHUNOV, S.S., kand. tekhn. nauk; MOGILEVSKIY, I.I.; ABAKUMOV, O.N.

Determining the coefficients of moisture by the method of
a constant overflow on the surface of the sample. Trudy
VNIITP no.18:156-166 '61. (MIRA 17:1)

KORCHUNOV, S.S., kand. tekhn. nauk; MOGILEVSKIY, I.I.

Investigating the process of the mechanical removal of water from peat. Trudy VNIITP no.18:109-134 '61.

Investigating the process of peat extrusion by compression. Ibid.:135-155

Mechanism of moisture decrease in peat bogs during drainage. Ibid.:166-182

True level of ground waters in peat deposits in its measurement by means of sightholes. Ibid.:182-186 (MIRA 17:1)

BULYKO, M.G., kand.tekhn.nauk; MOGILEVSKIY, I.I., kand.tekhn.nauk

Comparative analysis of a ring and roller press for mechanical
dehydration of wet peat. Izv. vys. ucheb. zav.; gor. zhur. 6
no.3:64-69 '63. (MIRA 16:10)

1. Kalininskiy torfyanoy institut. Rekomendovana kafedroy
mekhanicheskoy pererabotki torfa.

I. I. Mogilevskiy (USSR), S. S. Korchunov

"Peat compression and de-watering theory problems "

Report submitted for the 2nd International Peat Congress, Leningrad,
15-22 Aug 63.

MOGILEVSKIY, I. I., inzh.

Application of the similitude theory to mechanical dehydration
of soils of the peat type and other such matter. Isv. vys.
usheb. zav.; gor. shur. no.10:48-54 '61. (MIRA 15:10)

1. Kalininskiy torfyanoy institut.

(Peat soils) (Soil moisture)

MEGILEVSKIY, I.I.

Calculation of the forces applied in the extrusion of wet peat
placed between flat plates. Izv. vys. ucheb. zav.; ser. shur.
no. 4:41-46 '61. (MIRA 14:6)

1. Megilevskiy terfyaney institut. Rekomendovana kafedroy
mekhanicheskoy pererabotki torfa Kiyevskogo terfyanogo instituta.
(Peat industry)

MOGILEVSKIY, I.I., inzh.

Calculation of the ring press for dewatering peat and similar materials. Torf.prom. 37 no.2:29-32 '60. (MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti Gosplana RSFSR.
(Peat--Drying)

BERENSHTEYN, S.A.; VAYSLEYB, V.P.; VARENIK, I.F.; DOBRYNCHENKO, M.V.;
YEGOROV, B.P.; KLISENKO, Yu.F.; MOGILEVSKIY, I.I. [deceased];
PEREYASLAVTSEV, N.A.; PILIPENKO, V.I.; SAPOZHNIKOV, F.V., inzh.;
SHEPELEV, V.M.; SIMULEVICH, M.L.; YARMOLINSKIY, I.M.; SHAGALOV,
Ye.S., red.; KORIKOVSKIY, I.K., red.; LARIONOV, G.Ye., tekhn. red.

[Construction of the V.I. Lenin State Regional Electric Power
Plant in Simferopol] Opyt stroitel'stva Simferopol'skoi GRES
im. V.I. Lenina [By] S.A. Berenshtein i dr. Moskva, Gosenergoizdat,
1962. 151 p. (MIRA 15:6)

(Simferopol--Electric power plants)

KON', Ya.S.; MOGILEVSKIY, I.I., direktor-polkovnik, nachal'nik.

Dispensary treatment of dysentery patients. Zhur.mikrobiol.epid.i immun. no.
7:48-51 J1 '53. (MLRA 6:9)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya gigyeny i epidemio-
logii Ministerstva putey soobshcheniya. (Dysentery)

MOGILEVSKIY, I. A., Cand. Tech Sci -- "Experimental study of
[As applied to marine boiler plants,]
the processes of removing drop moisture by vapor" Gor'kiy,
Fleet
1961. (Min of River ~~Transport~~ RSFSR. Gor'kiy Inst of Engi-
neers of Water Transport) (KL, 8-61, 246)

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the starting pulp and the organisation of flotation
according to scheme shown in Fig.4. It is stated in
the editorial remarks that in view of the propositions
made by the authors further discussion on the subject
is invited. There are 4 tables, 4 diagrams and 8
Russian references.

Mogilevskiy, I. A.

AUTHORS: Berger, G.S., Cand.Tech.Sc., Mogilevskiy, I.A., Ing.¹⁵⁵
(KNIUI) and Koybash, V.A., Cand.Tech.Sc. (DII).

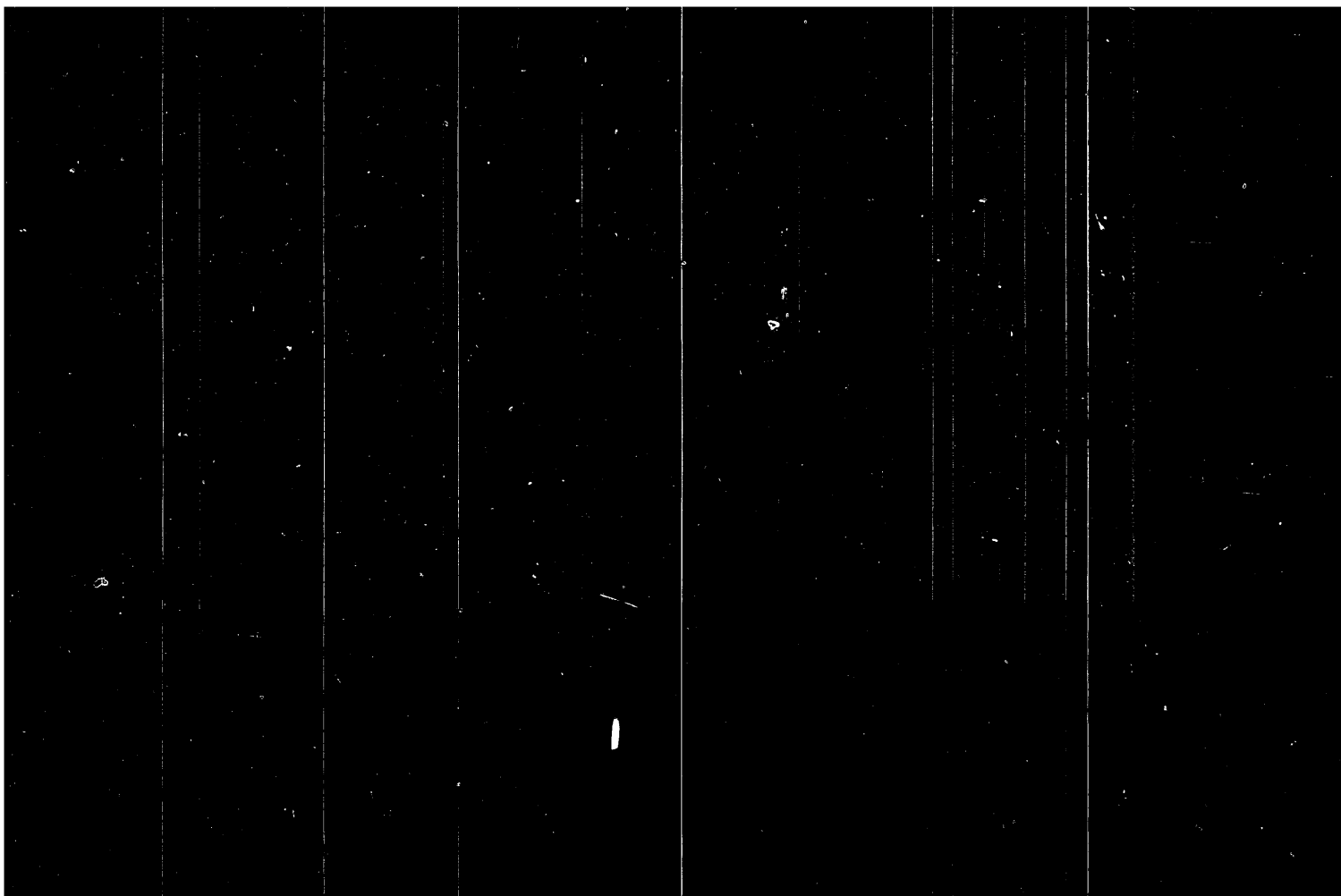
TITLE: On increasing the output of flotation machines on coal washeries. (O povyshenii proizvoditel'nosti flotatsionnykh mashin na ugleobogatitel'nykh fabrikakh).

PERIODICAL: "Koks i Khimiya" (Coke and Chemistry), 1957, No.3, pp.11-16 (U.S.S.R.)

ABSTRACT: The efficiency of operation of multi-cell flotation machines for coal is discussed. A large yield of concentrate during flotation of coals causes a sharp decrease in the volume of pulp moving along a multi-cell flotation machine which leads to an increase in the time of flotation in the tail cells. In order to obtain the same flotation time in all cells, it is necessary to decrease the volume of tail cells (eq.6). This, however, will not correspond to optimum flotation conditions, as a longer time is required for the treatment of grains in tailings which are difficult to float. At the same time, the duration of flotation in the tail cells of an industrial flotation machine with cells of equal volume is too long. The experimental data obtained on a laboratory flotation machine with variable volume of the cell, indicated that optimum conditions are somewhere between the above two sets of extreme values. Methods of increasing the output of flotation machines discussed in

* KANAGANDA Sci. Res.
COAL INST.

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MOGILEVSKIY, I. A.

"Experimental Investigation of the Process of the Contamination of
Steam With Moisture in Water Lines of Marine Steam Boilers." Cand Tech
Sci, Kiev Order of Lenin Pol technic Inst, Min Higher Education USSR, Kiev, 1955.
(KL, No 18, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (16).

STRAKHUN, S.S., insh.; MOGILEVSKIY, I.A., insh.

Medium-sized trawlers. Sudostroenie 23 no.12:1-3 D '57.
(MIRA 11:2)

(Trawls and trawling)

MOGILEVSKIY, I., prepodavatel' avtoshkoly.

Traffic regulations. Avt.transp. 35 no.4:35 Ap '57.

(MLRA 10:5)

(Traffic regulations)

CHUKLIN, S., prof.; CHUMAK, I.; MOGILEVSKIY, I.

Testing cold-storage rooms for freezing meat. Mias. ind.
SSSR 32 no.1:14-16 '61. (MIRA 14:7)

1. Odesskiy tekhnologicheskii institut pishchevoy i kholodil'noy
promyshlennosti.
(Meat) (Cold storage)

ACC NR: AP7000318

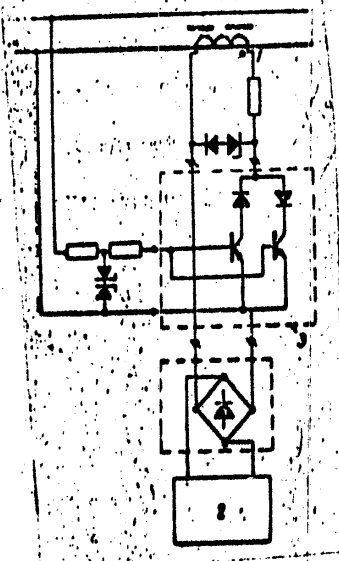


Fig. 1. Return current relay

1 - Differentiating transformer;
2 - reacting unit; 3 - AND circuit.

SUB CODE: 09/ SUBM DATE: 23Mar64/

Card 2/2

ACC NR: AP7000318

(A)

SOURCE CODE: UR/0413/66/000/022/0058/0058

INVENTOR: Mogilevskiy, G. V.; Bozhko, A. Ye.

ORG: none

TITLE: Contactless fast-acting return current relay. Class 21, No. 188559

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 58

TOPIC TAGS: electr/c relay, electronic circuit, transistorized circuit, electronic transformer

ABSTRACT: An Author Certificate has been issued for a contactless fast-acting return-current relay. The relay is used in automatic d-c disconnectors and contains a differentiating current transformer that initiates a pulse proportional to the rate of change of the current and a reacting unit. To use the relay in d-c return current circuits, a semiconductor AND circuit, connected between the differentiating transformer and the output unit, compares polarities of the above pulse and the line voltage. Orig. art. has: 1 figure.

Card 1/2

UDC: 621.316.925.4

MOGILEVSKIY, G.V., kand. tekhn. nauk; SALENKO, V.D., inzh.

Noncontact overload trip mechanism for automatic a.c. circuit
breakers. Elektrotehnika 36 no.5:24-25 May '65.
(MIRA 10:5)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6
Trudy KNP 30 NO. 1:41-48: 80. (Mina 14.7)
(Magnetic fields--Electromechanical analogies)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134900035-6

The Design of Electro-magnets

certain practical precautions that were taken are briefly mentioned.

There are 5 figures, 3 tables and 2 references, 1 of Card 5/5 which is Soviet and 1 is a Russian translation of an American book.

ASSOCIATION: Khar'kovskiy politekhnicheskii institut
(Khar'kov Polytechnical Institute)

SUBMITTED: May 25, 1959

SOV/144-59-8-7/14

The Design of Electro-magnets

the magnetic induction at the corners of the pole is also assumed infinite and this increases the irregularity of the field. In reality, saturation of the material reduces the irregularity of the field and so reduces the error when using Maxwell's approximate formula. A numerical example is worked out to illustrate this point. It is concluded from evaluation of the errors that the formula given may be used to determine the tractive forces of electro-magnets from measurements of magnetic flux. This method is particularly convenient for a.c. magnets, as vibration of the armature complicates dynamometer measurements. The method is applicable to magnets with U- or E-shaped cores, to iron-clad magnets, etc. In order to verify the method, tests were made of the tractive force of a U-shaped a.c. magnet with two coils. The main data are given and the results of the calculation are presented in Table 3. It will be seen that the agreement with practice is satisfactory;

Card 4/5

The Design of Electro-magnets

SOV/14-59-8-7/14

terms in these equations are approximate as they are derived for the case of an infinitely long pole. Calculations are made of the tractive effort of the magnet on the basis of Maxwell's formula, and expression (20) is derived for the force acting per unit length of pole in the direction perpendicular to the paper. The magnetic induction at the centre of the pole is given by Eq (22). Curves of the distribution of magnetic induction over the end faces of a magnet for particular conditions are plotted in Fig 4. Maxwell's simplified formula (26) is often used for practical calculations on electro-magnets. It may be based either on the magnetic flux corresponding to a uniform field or on the total magnetic flux issuing from the end surface. Values of the ratio of the magnetic force calculated by different formulae to the force calculated by the accurate equation (24) are given in Table 2. It will be seen that Eq (27) which assumes uniform field is much less accurate than Eq (28) which considers the total magnetic flux from the end surface. The greatest error obtained with this method is 18.8%. In the calculations it is assumed that the permeability of the material is infinite. Therefore,

Card
3/5

The Design of Electro-magnets

SOV/144-59-8-7/14

bulging of the field, and is given by expression (8). Calculated values of the permeances for the case considered are in Table 1. The permeance due to bulging of the field can also be determined by a method described by Roters. Also, Slivinskaya has given an empirical formula for the permeance between square pole faces; see expression (10). From this the permeance due to field bulging may be calculated, using formula (11), and the results are given in Table 1. The reasons for differences between results obtained by the different methods of calculation are considered and an evaluation of errors is made. The calculation of the permeance from the lateral faces of the magnet using formula (12) should give a negative error. A graph of this permeance as a function of distance from the pole face calculated in different ways is given in Fig 3 and it will be seen that formula (13) is in good agreement with the empirical formula of Slivinskaya. After consideration of the differences between the various equations, Eq (16) is recommended for the permeance from the pole faces and Eq (17) for that from the lateral surfaces. The constant

Card 2/5

AUTHOR: Mogilevskiy, G.V. (Cand.Tech.Sci., Acting Docent) SOV/144-59-8-7/14

TITLE: The Design of Electro-magnets

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Elektromekhanika, 1959, Nr 8, pp 71-78 (USSR)

ABSTRACT: This is a mathematical article on the calculation of magnetic fields. The magnetic field considered is that of two identical rectangular poles, as illustrated in Fig 1. Its depth in a plane perpendicular to the paper is appreciably greater than its width. The field is assumed to be plane-parallel and calculations may be made by the method of conformal representation assuming that the permeability of the poles is infinite. In calculating the magnetic field it is necessary to determine the complex potential field for the given pole configuration. It is shown that the potential field is given by a second-order elliptical integral, as in Eq (2). Expressions (2) and (4) together give a parametric representation of the complex potential field. The magnetic permeance between the ends of the poles is given by Eq (6). Assuming uniform field, the magnetic permeance is obtained by expression (7). The difference between these two is usually known as permeance due to

Card 1/5

SOV/110-59-4-10/23

The Use of the Theory of Similarity in the Design of Electro-Magnets defects. The condition of geometric similarity cannot be fulfilled when the armature is in the out position because the equivalent air gap length should be constant whatever the dimensions of the magnet. Therefore, when the design has been made it should be checked for the armature in this position particularly in respect of coil heating if alternating current is used. The method may give dimensions of the magnetic system that cannot be obtained conveniently with standard materials or which do not fit easily into the machine and so some modification of the final design may be required. Even so, the method is much less laborious than the usual one, and the accuracy is considerably improved. An appendix shows how to allow for the filling factor of the coil.

Card 4/4 There are 2 figures and 4 Soviet references.
 SUBMITTED: July 17, 1958

SOV/110-59-4-10/23

The Use of the Theory of Similarity in the Design of Electro-Magnets

tractive effort or torque required. In practice, it is necessary to increase the magnetic induction in large magnets to obtain the best design. These difficulties can be overcome reasonably simply in the following way. The temperature rise of the initial magnet is so chosen that the final temperature rise as obtained by Eq (5) is correct and this can easily be done if the relationship between the temperature rise and the voltage or current in the coil is known for the initial magnet. Two examples of the use of the proposed procedure are then given. The first example concerns the design of an electro-magnet with rotating armature having a given torque for a given angle of rotation starting from an available magnet of the correct shape and of known properties. The second example concerns the design of an electro-magnet in which the armature moves in a straight line and is of given tractive effort for a given travel, starting from an available magnet of suitable shape and known properties. Particular attention is paid to obtaining the correct induction and temperature rise in the two cases.

Card 3/4

Although the method is undoubtedly useful it has certain